

What is claimed is:

[Claim 1]

An apparatus for making a cut in an elongated strip of material comprising:

at least one modular, self-contained cassette cutter including:

an upper cutter portion having a blade retaining plate and at least one blade, said upper cutter portion in slideably movable contact with a lower cutter portion;

retaining springs acting on and separating said cutter portions; and

mounting pins in contact with said at least one blade for pressably securing said at least one blade to said blade retaining plate;

wherein said apparatus further comprises screw holes through said lower cutter portion for mounting said apparatus to a press.

[Claim 2] The apparatus of claim 1 further comprising an L-shaped slot within said blade retaining plate for securing said at least one blade for end cutting.

[Claim 3] The apparatus of claim 2 further comprising a short blade and a long blade for said end cutting.

[Claim 4] The apparatus of claim 2 including screw holes in said blade retaining plate for tapered tipped setscrews to press fit said at least one blade against said blade retaining plate.

[Claim 5] The apparatus of claim 4 further comprising at least two flat tipped mounting pins for press fitting a long portion of said at least one blade, and tapered tipped setscrews for press fitting a short portion of said at least one blade.

[Claim 6] The apparatus of claim 5 wherein said long portion of said at least one blade is a long blade, and said short portion of said at least one blade is a short blade.

[Claim 7] The apparatus of claim 1 including a plurality of triangular shaped slots within said blade retaining plate for securing said at least one blade for corner cutting.

[Claim 8] The apparatus of claim 7 further including a plurality of straight blades arranged in a saw-tooth fashion to cut said plurality of triangular shaped slots in said elongated strips of material for corner cutting.

[Claim 9] The apparatus of claim 8 further comprising a triangular shaped wedge for pressing two of said straight blades against said blade retainer plate, such that said straight blades form two adjacent sides of a triangle.

[Claim 10] The apparatus of claim 1 further including mounting screws for attaching said apparatus to an arbor press.

[Claim 11]

A self-contained cassette module cutter for cutting elongated strips of material in a press to form predetermined shapes comprising:

- an upper cutting portion including:

 - an adapter pressure plate;

 - at least one cutting blade;

- a blade retainer plate comprising:

 - a plurality of slots for holding said at least one cutting blade, said plurality of slots geometrically positioned such that said at least one cutting blade forms an L-shape for end cutting or a plurality of triangular shapes for corner cutting;

screw holes positioned for setscrews to press and secure said at least one cutting blade against said blade retainer plate;

mounting screws securing said adapter pressure plate to said blade retainer plate; and

a top front and top rear safety shield;

a lower cutting portion including:

- a base plate/material cradle;
- a stripper plate; and
- a bottom front and bottom rear safety shield;

guide pins passing through said blade retainer plate, return springs, return spring seats, and threaded into said base plate/material cradle;

apertures at each end of the longitudinal axis of said cassette module for inserting and exiting said elongated strips of material; and

cassette base mounting screws securing said lower cutter portion to a press.

[Claim 12] The self-contained cassette module cutter of claim 11 further comprising a short blade and a long blade for said end cutting.

[Claim 13] The self-contained cassette module cutter of claim 12 further comprising flat tipped screws accessible from a first side of said cassette module and positioned by a portion of said plurality of slots for pressing said long blade against said blade retainer plate.

[Claim 14] The self-contained cassette module cutter of claim 12 further comprising a screw hole having a tapered end for a tapered tipped setscrew to press fit said short blade against said blade retainer plate, said tapered tipped setscrew accessible from a first side of said cassette module.

[Claim 15] The self-contained cassette module cutter of claim 14 wherein said tapered tipped setscrew presses against a wedge in contact with said short blade.

[Claim 16] The self-contained cassette module cutter of claim 15 wherein said tapered tipped setscrew is aligned approximately parallel to said short blade direction.

[Claim 17] The self-contained cassette module cutter of claim 11 further comprising a plurality of straight blades arranged in a saw-tooth fashion to cut a plurality of triangular slots in said elongated strips of material for corner cutting.

[Claim 18] The self-contained cassette module cutter of claim 17 further comprising a triangular shaped flexing wedge for pressing two of said straight blades against said blade retainer plate, such that said straight blades form two adjacent sides of a triangle.

[Claim 19]

A method of cutting elongated strip material comprising:

marking said elongated strip material with linear measurements of locations for corner cuts and end cuts;

attaching at least one end cut cassette module in a press, said at least one end cut cassette module including a plurality of slots for holding at least one cutting blade, said plurality of slots geometrically positioned such that said at least one cutting blade forms an L-shape for end cutting;

operating said press with said at least one end cut cassette module secured therein to perform end cuts at said linear measurements marked for end cuts on said elongated strip; and

moving said elongated strip to additional linear measurements for end cuts and operating said press with said cassette module to perform additional end cuts.

[Claim 20]

The method of cutting of claim 19 further comprising:

attaching a corner cut cassette module in said press, said corner cut cassette module including a plurality of blades forming a triangular shape for corner cutting; and

moving said elongated strip to linear measurements for corner cuts and operating said press with said corner cut cassette module to perform corner cuts.